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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,781

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Marcus Eh

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EXAMINER

BROWN, COURTNEY A

ART UNIT

PAPER NUMBER

1617

MAIL DATE

DELIVERY MODE

10/13/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,781	Applicant(s) EH ET AL.	
	Examiner COURTNEY BROWN	Art Unit 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Upon further consideration, prosecution on the merits of this application is reopened on claims 1-7.

This Office Action is in response to the amendment filed September 14, 2010. Claims **1-14** are pending in the application. Claims 1 and 4 have been amended. Claims **8-14** have been withdrawn as being directed to a non-elected invention. Claims **1-7** are being examined for patentability.

Withdrawn Rejections

Applicant's amendments and arguments filed September 14, 2010 are acknowledged and have been fully considered. Any rejection and/or objection not specifically addressed below is herein withdrawn.

The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application. The rejection of claims 1-7 under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US Patent 6,627,763 B2) in view of Anderson et al. (US Patent 6,479,682 B1, referred to as '682') as evidenced by Merriam-Webster's Online Dictionary, (<http://www.merriam-webster.com/>) **is withdrawn** in view of Applicant's arguments.

New Rejection(s)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

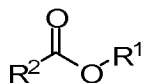
The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims **1-7** are newly rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US Patent 6,627,763 B2, previously cited and referred to as '**763**') and /or Anderson et al. (**US Patent 6,207,857 B1, referred to as '857**') in view of Paget et al. (AU-B-71940/94, previously cited) .

Applicant's Invention

Applicant claims a method for the spontaneous release of a fragrance having the steps: A.) providing a compound of formula I;



Compound of formula I

B.) producing a formulation which comprises the compound of formula I and a medium, such that the compound of formula I is stable in the formulation, wherein said medium is acidic and oxidative and has a water content of less than or equal to 10 wt.% relative to the total mass of the medium; and

C.) treating said formulation such that the compound of formula I disintegrates and the fragrance is released **spontaneously based on a rapid rate of hydrolysis of the compound of formula I.**

***Determination of the scope and the content of the prior art
(MPEP 2141.01)***

'763 teaches enol ester compounds with protected hydroxy groups as **precursors for organoleptic agents**, such as fragrances, and masking agents and for antimicrobial agents. When activated, the compounds of formula (Ia) are cleaved and form one or more organoleptic and/or antimicrobial compounds (abstract). The compounds are virtually odorless under room temperature, atmospheric conditions and about 20 to 100% relative humidity. However, under activating conditions, they are cleaved and one or more active compounds with organoleptic and/or antimicrobial properties are generated. '763 teaches that the phrases "activating conditions" or "activated" are used

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interchangeably and are intended to mean those conditions which lead to cleavage of the compounds and the formation of "active," i.e., organoleptic and/or antimicrobial agents. For example, the following activating conditions lead to cleavage of compounds of formula (Ia) and to formation of the desired active compounds: skin bacteria, especially axilla bacteria; enzymes such as protease or lipase; elevated temperature; **acidic or alkaline pH-values**; and/or light (column 3, lines 4-20). The compounds of formula (Ia) may be employed as fragrance precursors in a variety of compositions, including, for example, **personal care products, laundry products, cleaning compositions**, pet care products and environment scents such as air fresheners (column 5, line 65 bridging to column 6, lines 1-5). When the compounds are employed as **fragrance precursors** and precursors for odor masking agents, they are present in such compositions individually in an amount effective to enhance or to mask the characteristic odor of a material. More commonly, however, the compounds are mixed with other fragrance components in an amount sufficient to provide the desired odor characteristics. Due to the **in situ** generation of the active compounds, '763 teaches that the desired effect is prolonged and the substantively on different substrates is enhanced (column 6, lines 8-18). Upon cleavage, the compounds form lactones and optionally **aldehydes** (column 3, lines 20-23 of Anderson et al.) such as **decanal, dec-9-enal, dec-4-enal, and octanal** as listed on page 10 of the instant specification (compounds of instant formula I, column 6, lines 25 bridging to column 7, line 29 of '763) and/ or **ketones** (column 3, lines 20-23 of Anderson et al.) such as **carvone and**

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acetophenone as listed on page 11 of the instant specification (compounds of instant formula I, column 6, lines 25 bridging to column 7, line 29 of Anderson et al.).

'857 teaches enol ester compounds of formula I :



as precursors for organoleptic and antimicrobial compounds which are generated in the presence of skin bacteria, enzymes or acidic or alkaline conditions (see abstract and column 1, lines 55-61 and column 2, lines 1-5). The precursor molecules of formula I supply different active compounds simultaneously or successively (column 1, lines 39-42).

***Ascertainment of the difference between the prior art and the claims
(MPEP 2141.02)***

The difference between the invention of the instant application and that of that of '763 and '857 is that '763 and '857 do not expressly teach the enol ester of instant compound I. However, the use of the enol ester of instant compound I was known in the prior art. For example, Paget et al. teach a process for perfuming fabrics

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wherein said process is characterized in that a detergent composition contains the compound of instant formula I wherein $R^2=Y$ which represents a C7-C24 linear or branched or unsaturated alkyl radical and $R^1=R$ which represents an alkylidene radical derived from a fragrant aldehyde (i.e., a radical of the enol form of an aldehyde of instant application) or an alkylidene radical derived from a fragrant ketone with 5-18 C atoms (i.e., the radical of a ketone having 10 or more C atoms of instant application) (see claims 1-7 of Paget et al.).

Regarding the amount of water present in the instant sour and oxidative medium, **763** teaches teach water in amounts less than 10% . This includes amounts all the way to 0% (see example 55a and 55b, column 23 bridging to column 24, lines 1-44). One of ordinary skill in the art would have been motivated to utilize water in low amounts based on the teachings of **763** . It would have been obvious to one of ordinary skill in the art at the time of the invention to engage in routine experimentation to determine optimal or workable ranges for water that produce expected results. Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F. 2d 454, 105 USPQ 233 (CCPA 1955).

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

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It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of '763 and/or '857 with Paget et al. to arrive at the claimed method. Each reference teaches the use of enol ester compounds that are similar in structure and used as fragrance precursors. The claims would have been obvious because the substitution of one known enol ester compound for another enol ester compound would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

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Conclusion

The claims are not allowed.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney A. Brown whose telephone number is 571-270-3284. The examiner can normally be reached on 9:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fereydoun Sajjadi can be reached on 571-272-3311. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Courtney A. Brown
Patent Examiner
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Group Art Unit 1617

/Ileana Popa/

Primary Examiner, Art Unit 1633